

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
Infringement of U.S. Patent No. 8,660,560

This chart shows on an element-by-element basis how Telefonaktiebolaget LM Ericsson (“LM Ericsson”) and Ericsson Inc. (“Ericsson USA”) (collectively, “Ericsson”) infringe Claims **1, 6, 7, and 8** of U.S. Patent No. 8,660,560 (the “’560 Patent”) through the making, using, offering for sale, or sale in the United States, and/or importation into the United States, of various products and offerings, including Ericsson Radio System, including its 5G Radio Access Network, Ericsson LTE Radio Access Network, and Ericsson WCDMA Radio Access Network components, including their respective Next Generation NodeB or gNB (5G), eNodeB or eNB (LTE), and NB (WCDMA) base stations (collectively referred to as “Accused Products”), as well as any other products that it makes, uses, offers for sale, or sells in the United States, and/or imports into the United States that operate in the manner set forth below, including any terminal or user equipment that Ericsson caused or induced to operate as set forth below.

Koninklijke KPN N.V. (“KPN”) further states that Ericsson also indirectly infringes each asserted claim in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by third parties in the United States, including customers, partners, and service providers, through the dissemination of the Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts would result in the direct infringement of the ’560 Patent. For example, Ericsson took active steps to encourage service providers and other customers to use the Accused Products in the United States in a manner that would directly infringe each element as described below, including by marketing the functionality and creating and distributing various training programs for use of it. Non-limiting examples of such actions include the following: *Ericsson Training to Suit Your Learning Style and Competence Needs*, ERICSSON, https://www.ericsson.com/en/portfolio/training-offerings?page=learning_path&path=19 (last visited Nov. 14, 2022); *Long Term Evolution (LTE) Radio Access Network (RAN) L18: Training Programs*, ERICSSON, (2018) https://mediabank.ericsson.net/deployedFiles/ericsson.com/498_03819-FAP%20130%20506_Long%20Term%20Evolution%20Radio%20Access%20Network%20L18%20Rev%20B.pdf; *WCDMA RN 2019/2020 Learning Services*, ERICSSON, (2019), https://mediabank.ericsson.net/deployedFiles/ericsson.com/WCDMA%20RAN%202019_2020%20-%20Rev%20-%20A.pdf; and https://www.ericsson.com/en/portfolio/training-offerings?page=learning_path&path=4, as well as the materials cited below. Ericsson thus induced, and continues to actively induce, the direct infringement of the ’560 Patent by service providers and other customers by distributing the Accused Products and, among other things, creating and distributing various programs that train customers to use them in an infringing manner.

KPN notes that this chart contains an exemplary, non-limiting description of Ericsson’s infringement that is representative of how each Accused Product infringes. KPN further notes that it makes these contentions based on the information reasonably available to it at this time as discovery has not commenced, and Ericsson has not provided any documents concerning its infringement. Further, the Court has yet to issue its claim construction rulings. KPN thus reserves the right to modify, supplement, and/or amend these

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
Infringement of U.S. Patent No. 8,660,560

contentions as additional evidence and information become available, including in light of discovery, invalidity, prior art, claim construction, or any information provided by Ericsson or any other party or non-party to this action.

As demonstrated below, KPN contends that each element of each asserted claim is literally infringed by the Accused Products. KPN further contends that, to the extent that any particular element is shown not to be met literally by the Accused Products, each Accused Product infringes under the doctrine of equivalents for the reasons set forth below because there would be no substantial difference between the elements of the asserted claims and the corresponding functionality in the accused instrumentality, *i.e.*, the corresponding functionality in the Accused Products does substantially the same thing, in substantially the same way, to achieve substantially the same result(s) as the claimed elements.

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
Infringement of U.S. Patent No. 8,660,560

Claim 1	
<p>1. [Pre] A system for updating a neighbour cell list in a telecommunications architecture comprising a first wireless access network having a first wireless access node for which at least one first neighbour cell list is defined and a second wireless access network having a second wireless access node for which at least one second neighbour cell list is defined, the system comprising</p>	<p>To the extent that the preamble is limiting, it is met by each Accused Product, each of which comprises, “[a] system for updating a neighbour cell list in a telecommunications architecture comprising a first wireless access network having a first wireless access node for which at least one first neighbour cell list is defined and a second wireless access network having a second wireless access node for which at least one second neighbour cell list is defined.”</p> <p>For example, each Accused Product comprises equipment used to support a telecommunications architecture comprising one or more of the following: a NR (5G) Radio Access Network, an LTE Radio Access Network, and/or a WCDMA Radio Access Network. <i>See, e.g.:</i></p> <p style="text-align: center;">Ericsson's 5G NR RAN is part of Ericsson Radio System and a vital component of our 5G platform. NR RAN encloses a future-proof software offering, co-existing with LTE and smoothly integrating 5G NR.</p> <p><i>NR Radio Access Network</i>, ERICSSON, https://www.ericsson.com/en/portfolio/networks/ericsson-radio-system/radio-system-software/nr-radio-access-network (last visited Nov. 29, 2022);</p> <p style="text-align: center;">To enable an efficient means for operators to migrate their legacy RAN to LTE, Ericsson offers advanced mixed-mode (2G/3G/LTE/IoT) solutions which run simultaneously on one Baseband board.</p> <p><i>LTE Radio Access Network</i>, ERICSSON, https://www.ericsson.com/en/portfolio/networks/ericsson-radio-system/radio-system-software/lte-radio-access-network (last visited Nov. 29, 2022);</p> <p style="text-align: center;">Through Ericsson's WCDMA Radio Access Network operators can provide a seamless experience as they introduce LTE or continue the LTE expansion. Operators also have the tools to radically lower their operational costs, maximize the network efficiency and performance, and always deliver the best customer experience.</p> <p><i>WCDMA Radio Access Network</i>, ERICSSON, https://www.ericsson.com/en/portfolio/networks/ericsson-radio-system/radio-system-software/wcdma-radio-access-network (last visited Nov. 29, 2022).</p>

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
 Infringement of U.S. Patent No. 8,660,560

	<p>Any of these networks may comprise a first wireless access network, such that any of their corresponding nodes (<i>e.g.</i>, an NB, eNB, or gNB) may comprise a first wireless access node. Further, any of the above networks may comprise a second wireless access network such that any of their corresponding nodes (<i>e.g.</i>, an NB, eNB, or gNB) may comprise a second wireless access node. Thus, for example, the first wireless access network may comprise one or more eNBs in an LTE network architecture and the second wireless access network may comprise one or more eNBs in an LTE network architecture.</p> <p>Further, each Accused Product is configured by Ericsson such that one or more of each such NB, eNB, and/or gNB has information about a neighbouring NB, eNB, and/or gNB. Such information comprises a neighbour cell list. As one non-limiting example, an eNB can have information about a neighbour eNB. In such example, each eNB serves as a wireless access network and such information corresponds to a neighbour cell list. Alternatively, in another non-limiting example, an eNB is configured such that it can have information about a neighbour NB or gNB. In such example, the eNB serves as a wireless access network and the NB or gNB serves as another wireless access network.</p> <p>Further, each Accused Product is configured by Ericsson such that one or more of each such NB, eNB, and/or gNB that has information can update such neighbour cell list through its Automatic Neighbor Relation (ANR) Function, which includes a Neighbor Detection Function that is configured to add one or more neighbours to a neighbour cell list and/or a Neighbor Removal Function that is configured to remove one or more neighbours from a neighbour cell list.</p>
<p>[1.1] a detector configured for detecting user terminals to be transferred from the first wireless access node of the first wireless access network to the second wireless access node of the</p>	<p>Each Accused Product is a system comprising “a detector configured for detecting user terminals to be transferred from the first wireless access node of the first wireless access network to the second wireless access node of the second wireless access network.”</p> <p>For example, each NB, eNB, or gNB comprises a detector configured by Ericsson to detect when a user terminal has or is to be transferred to another NB, eNB, or gNB.</p>

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
 Infringement of U.S. Patent No. 8,660,560

second wireless access network;	
[1.2] a selector configured for selecting a part of the user terminals;	<p>Each Accused Product is a system comprising “a selector configured for selecting a part of the user terminals.”</p> <p>For example, each NB, eNB, or gNB comprises a selector configured by Ericsson to select one or more user terminals capable of performing minimization of drive tests (MDT) functions and/or MDT measurements.</p>
[1.3] a request generator configured for requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of at least one of the first wireless access network and the second wireless access network;	<p>Each Accused Product is a system comprising “a request generator configured for requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of at least one of the first wireless access network and the second wireless access network.”</p> <p>For example, each NB, eNB, or gNB comprises a request generator configured by Ericsson to request one or more of the selected user terminals to report cell information from a plurality of wireless access nodes of at least the first and second wireless access networks. As one non-limiting example, such NB, eNB, or gNB will instruct the at least one selected terminal to report cell information of two or more NBs, eNBs, and/or gNBs, including information such as cell identity, carrier frequency, pilot signal strength, or pilot signal quality information.</p>
[1.4] a receiver configured for receiving the cell information from the one or more of the selected user terminals; and	<p>Each Accused Product is a system comprising “a receiver configured for receiving the cell information from the one or more of the selected user terminals.”</p> <p>For example, each NB, eNB, or gNB comprises a receiver configured by Ericsson to receive such logged cell information.</p>

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
 Infringement of U.S. Patent No. 8,660,560

<p>[1.5] updating means configured for updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information.</p>	<p>Each Accused Product is a system comprising “updating means configured for updating at least one of the first neighbour cell list and the second neighbour cell list using the received cell information.”</p> <p>For example, each Accused Product is configured by Ericsson such that one or more of each such NB, eNB, and/or gNB that has information can update a neighbour cell list using the received logged cell information through its Automatic Neighbor Relation (ANR) Function, which includes a Neighbor Detection Function that is configured to add one or more neighbours to a neighbour cell list and/or a Neighbor Removal Function that is configured to remove one or more neighbours from a neighbour cell list.</p>
<p>Claim 6</p>	
<p>6. [Pre] The system according to claim 1,</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above.</p>
<p>[6.1] wherein the request generator is configured for requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of the second wireless access network;</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above, “wherein the request generator is configured for requesting from the first wireless access node one or more of the selected user terminals to report cell information of a plurality of wireless access nodes of the second wireless access network.”</p> <p>For example, each NB, eNB, or gNB comprises a request generator further configured by Ericsson to request one or more of the selected user terminals to report cell information from a plurality of wireless access nodes of the second wireless access networks. As one non-limiting example, such NB, eNB, or gNB will instruct the at least one selected terminal to report cell information of two or more NBs, eNBs, and/or gNBs of the second wireless network, including information such as cell identity, carrier frequency, pilot signal strength, or pilot signal quality information.</p>
<p>[6.2] wherein the receiver is configured for receiving the cell information of the</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above, “wherein the receiver is configured for receiving the cell information of the wireless access nodes of the second wireless access network via the first wireless access node.”</p> <p>For example, each NB, eNB, or gNB comprises a receiver configured by Ericsson to receive such logged cell</p>

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
 Infringement of U.S. Patent No. 8,660,560

wireless access nodes of the second wireless access network via the first wireless access node,	information.
[6.3] further comprising a transfer system configured for transferring user terminals from the first wireless access network to the second wireless access network after receiving the one or more cell parameters of wireless access nodes of the second wireless access network via the first wireless access node.	<p>Each Accused Product comprises the system according to claim 1, detailed above, and “further compris[es] a transfer system configured for transferring user terminals from the first wireless access network to the second wireless access network after receiving the one or more cell parameters of wireless access nodes of the second wireless access network via the first wireless access node.”</p> <p>For example, each Accused Product is configured by Ericsson to perform a handover and/or cell reselection operation after receiving the specified logged information. Such operations comprise transferring one or more user terminals to a different NB, eNB, and/or gNB.</p>
Claim 7	
7. [Pre] The system according to claim 1,	Each Accused Product comprises the system according to claim 1 , detailed above.
[7.1] wherein the telecommunications system is further	Each Accused Product comprises the system according to claim 1 , detailed above, “wherein the telecommunications system is further configured for receiving location information from one or more of the detected user terminals.”

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
 Infringement of U.S. Patent No. 8,660,560

<p>configured for receiving location information from one or more of the detected user terminals and</p>	<p>For example, each NB, eNB, or gNB is configured by Ericsson to receive location information from at least one terminal. For example, each Accused Product is configured by Ericsson to obtain information regarding at least the cell in which the terminal is operating, such cell corresponding to a particular geographic coverage area.</p>
<p>[7.2] wherein the location information is used as a selection parameter for selecting the part of the detected user terminals.</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above, “wherein the location information is used as a selection parameter for selecting the part of the detected user terminals.”</p> <p>For example, each Accused Product is configured by Ericsson such that it uses the location information as one of the parameters for selecting one or more user terminals to perform MDT functions and/or measurements.</p>
<p>Claim 8</p>	
<p>8. [Pre] The system according to claim 1,</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above.</p>
<p>[8.1] wherein one or more thresholds, possibly service-dependent, are defined in the telecommunications system for transferring the user terminals between the first wireless access network and the second wireless access network and</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above, “wherein one or more thresholds, possibly service-dependent, are defined in the telecommunications system for transferring the user terminals between the first wireless access network and the second wireless access network.”</p> <p>For example, each Accused Product is configured by Ericsson such that it comprises one or parameters that comprise thresholds (e.g., measured signal level or signal quality or the surrounding cells) for transferring user terminals (UEs) between the first and second wireless networks.</p>
<p>[8.2] wherein at</p>	<p>Each Accused Product comprises the system according to claim 1, detailed above, “wherein at least one of the</p>

Koninklijke KPN N.V. v. Telefonaktiebolaget LM Ericsson et al., No. 2:22-cv-282 (E.D. Tex.)
Infringement of U.S. Patent No. 8,660,560

<p>least one of the thresholds is used as a selection parameter for selecting the part of the detected user terminals.</p>	<p>thresholds is used as a selection parameter for selecting the part of the detected user terminals.”</p> <p>For example, each Accused Product is configured by Ericsson such that it uses at least one of the aforementioned thresholds as a selection parameter for selecting one or more user terminals to perform MDT functions and/or measurements.</p>
--	---